

REMARKS

The replacement paragraph [27] presented in the reply to the Office Action mailed October 10, 2008, as filed on January 12, 2009, contains four occurrences of a typographical artifact. The amended paragraph [27] set forth above corrects this error.

The examiner has rejected claims 5, 7-9, 11-13 and 15 under 35 USC 103 over applicant's admitted prior art (APA) in view of Silva et al and has rejected claims 6, 10 and 14 over APA in view of Silva et al and further in view of Hann. Applicant has now canceled claims 5-12 and 15 and proposes that claim 13 should be amended as indicated above to include the feature of claims 14 and 15. It is requested that the above amendments be entered under 37 CFR 1.116, since they remove issues from consideration on appeal. In the circumstances, the only rejection to be addressed is the rejection over APA in view of Silva et al and further in view of Hann.

The subject matter of claim 13, as now amended, is a door closer including a door closer body (corresponding to the body 28 in the case of the embodiment shown in FIG. 6) formed with at least one channel (the channel 81 or 82 shown in FIG. 6) for flow of a pressure medium controlling operation of the door closer and also formed with at least one bore (not referenced) that intersects the channel and has first and second segments at opposite respective sides of the channel. The door closer further includes a control device (510A or 510B) fitted in the bore and having first and second opposite ends.

In accordance with claim 13, the control device includes a guiding part (32) at a first end of the control device and a support part (53) at the second end of the control device, and a control part (51) between the guiding part and the support part. The guiding part is located in the first segment of the bore and has a thread fillet (33) engaging the door closer body and supporting the control device relative to the door closer body. The support part is located in the second segment of the bore. A collar (54) of resilient plastic is located in the second segment

of the bore and surrounds the support part of the control device, and has at least one chase (61) to reduce its thickness at a certain part of the collar. The collar is under compression whereby the collar supports the second end of the control device relative to the door closer body and restrains the control device against rocking and swaying movement relative to the door closer body due to flow of pressure medium in the channel. The control part of the control device has a bevelled inner end (52) for cooperating with the door closer body to restrict pressure medium flow in the channel. The control device can be moved in its axial direction by turning the control device supported on the door closer body for adjusting the restriction of the pressure medium flow by the control part.

As described with reference to FIGS. 2 and 3, the control device of APA includes a guiding part 32 and a control part 35 having a bevel 36. The bevel 36 cooperates with the door closer body to restrict flow of pressure medium in the channel 23. When the bevelled end of the control part 35 enters the blind segment of the bore, axial movement of the control device provides fine control over the restriction on the pressure medium flow.

Silva et al discloses a fluid friction controller that comprises an outer housing member 13 in which is located an inner member 20 having three distinct length segments. The inner member 20 comprises a pair of cylindrical end bearings 21, 22 that ride in close sliding relationship with the inside wall of the opening 13, and a tapered surface 26 between the end bearings 21, 22.

The examiner asserts that it would have been obvious in view of Silva et al to have provided the control device shown in FIG. 3 with a support part and a collar. The examiner considers that the region designated A in the annotated FIG. 1 constitutes a support part within the meaning of claim 13 and that the element designated B in the annotated FIG. 1 is an apt counterpart of the collar referred to in claim 13. Applicant respectfully disagrees.

A rejection of claim 13 under 35 USC 103 based on the combination of APA and Silva et al is not justified simply by

pointing out that Silva et al teaches a valve having a beveled end of a control part, a support part at the beveled end of the control part, and a collar that can be placed around the support part for providing a supporting surface that can be placed against the housing body. Applicant submits that in order to carry the burden of establishing a prima facie case of obviousness, the examiner must show that there are enough similarities between the fluid friction controller of Silva et al and the door closer of APA that a person of ordinary skill in the art would see a benefit to applying features of the inner member 20 shown by Silva et al to the control device 21 or 22 of the door closer of APA.

Silva et al does not disclose the practical application of the fluid friction controller in any detail, except that it is connected between a pressure compensating pump 31 and a resistance 27. The purpose of the controller is to control flow while avoiding the factors that typically generate noise producing vibrations. In the condition illustrated in FIG. 1, the orifice provided by fluid friction controller is closed, whereas moving the inner member 20 the left of FIG. 1 opens the entrance to the orifice and permits fluid to flow from the inlet region 16 into the outlet region 18. The angle of divergence between the inner surface of the outer housing member 12 and the tapered exterior surface 26 of the inner member 20 are related so that the fluid passing through the orifice remains attached to the friction control surfaces along the entire length of the orifice.

Applicant submits that there is no basis in the prior art for applying features of the fluid friction controller of Silva et al to the door closer of APA when the record does not show any functional similarity between the APA and the disclosure of Silva et al and, moreover, the inlet line 15 and outlet line 17 of Silva et al must be spaced axially of the inner member 20 whereas in the door closer shown in APA the bore containing the control device intersects a channel for controlling flow of fluid along the channel.

Applicant submits that the examiner's rejection is based on speculation as to the materials that might be used in the controller shown by Silva et al. The examiner relies on the discussion of seals by Silva et al as suggesting that the bearing 21 or 22 may be under compression, but claim 13 does not suggest that the collar serves a sealing purpose.

The examiner has moreover suggested that the wording in claim 13 regarding the collar being under compression is functional. Applicant respectfully disagrees. Whether a collar is under compression is a matter of its current condition, and a statement to that effect is not a functional statement regarding the condition of the collar at some time in the future.

The examiner relies on the disclosure by Hann of a V-shaped slot 9 that serves as a flow controlling means as rendering obvious the feature of the chase provided in the collar of claim 13. The examiner argues that it would have been obvious to one of ordinary skill in the art to apply the flow controlling means of Hann to the control valve 21 of APA in order to control the flow of fluid between chambers. Applicant respectfully points out that if the control valve 21 of APA were modified by providing a collar, as recited in claim 13, the collar would be located in the blind segment of the bore containing the control device. Thus, there would be no possibility of fluid flow past the collar, such that it would be desirable to control the flow of fluid.

In view of foregoing, applicant submits that the subject matter of claim 13 is not disclosed or suggested by the cited

references, whether taken singly or in combination. Therefore claim 13 is patentable.

Respectfully submitted,

/John Smith-Hill/

John Smith-Hill
Reg. No. 27730

SMITH-HILL AND BEDELL, P.C.
16100 N.W. Cornell Road, #220
Beaverton, Oregon 97006

Tel: (503) 574-3100
Fax: (503) 574-3197

Docket: AWEK 3513